Contaminant Assessment Process

This blue goose, designed by J.N. "Ding" Darling, has become a symbol of the National Wildlife Refuge System.

The United States Fish and Wildlife Service (USFWS) is the only federal government agency whose primary mission is to conserve, protect, and enhance fish and wildlife and their habitats for the continuing benefit of the American people. A primary way that the USFWS fulfills this important mission is to manage the country's National Wildlife Refuges, which encompass over 93 million acres. The mission of the National Wildlife Refuge System (System) "is to administer a national network of lands and waters for the conservation, management, and where appropriate, restoration of the fish, wildlife, and plant resources and their habitats within the United States for the benefit of present and future generations of Americans" [16 USC § 668dd(a)(2) (1998)]. It is the responsibility of the USFWS to "ensure that the biological integrity, diversity, and environmental health of the System are maintained for the benefit of the present and future generations of Americans" [16 USC § 668dd(a)(4)(B)].

The mission of the U.S. Fish and Wildlife Service is working with others to conserve, protect and enhance fish, wildlife, plants and their habitats for the continuing benefit of the American people.

One aspect of maintaining environmental health for National Wildlife Refuges is to assess contaminant threats to refuge lands and resources by utilizing the contaminant assessment process (CAP). Although many people envision wildlife refuges as pristine havens for wildlife, many refuges have contaminant issues. The contaminant assessment process was developed by the United States Geological Survey Biological Resources Division's (USGS/BRD) Biomonitoring of Environmental Status and Trends (BEST) Program and the USFWS's Division of Environmental Contaminants (DEC). The USFWS utilizes the CAP to document existing and potential contamination issues affecting refuges by assessing several factors including known/suspected contaminant sources, known/suspected contaminated areas, contaminant transport pathways and areas vulnerable to spills/contamination. By utilizing the CAP, a comprehensive inventory of actual and potential contamination threats is developed and entered into CAP's national database. Assessment results allow USFWS personnel to understand contaminant issues affecting trust resources, prioritize necessary sampling and/or cleanup actions, develop proposals for future investigations, initiate pollution prevention activities and incorporate contaminant issues into refuge Comprehensive Conservation Plans.

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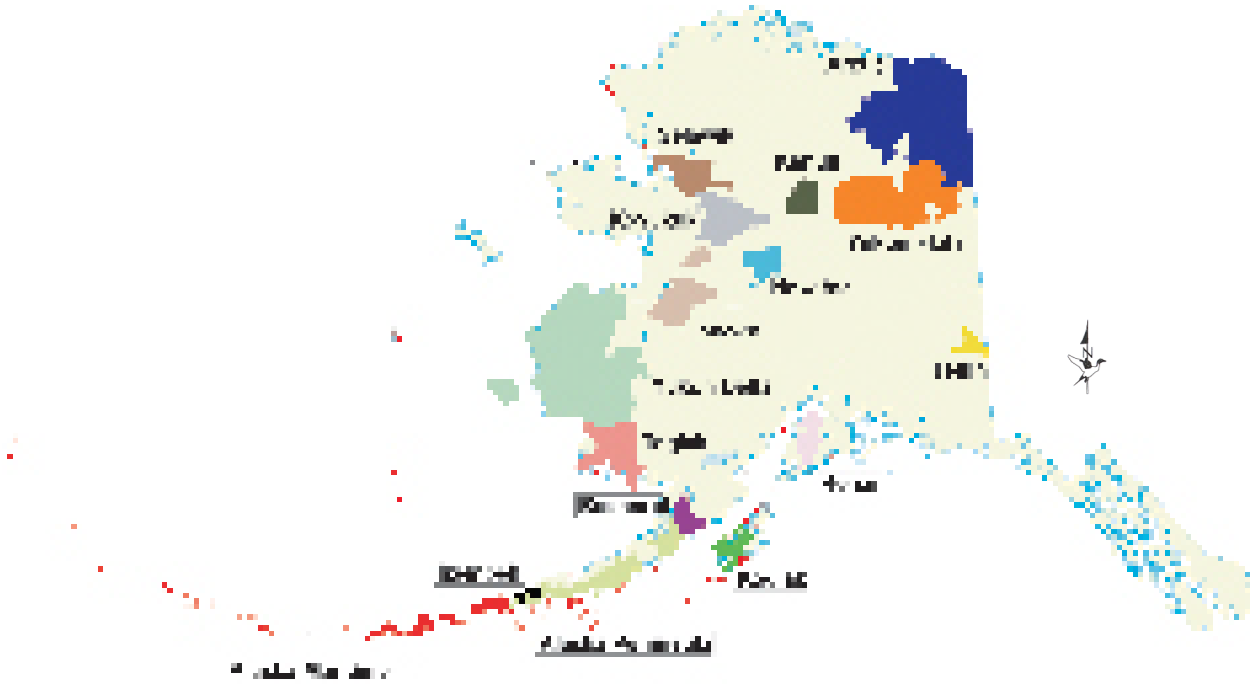
National Wildlife Refuge System Improvement Act of 1997

In 1999, the contaminant assessment process was initiated to evaluate contaminant issues for the 16 National Wildlife Refuges in Alaska (Figure 1). Over 80% of the National Wildlife Refuge lands are in Alaska, totaling over 76 million acres. While the large size and remoteness of the refuges in Alaska present special challenges for utilizing and applying the CAP, valuable information about potential contaminant threats still can be gained by using this process.

Although many people think of Alaska as an untouched wilderness—the last frontier, Alaska is not immune to contaminant problems. In fact, its remoteness has contributed to its contaminant burden. Even the National Wildlife Refuges in Alaska are not impervious to contaminant threats, and many of them have significant and regrettable contaminant histories. Past and current uses of refuge lands in Alaska have included a variety of activities including oil exploration and drilling, mining, military activities and even nuclear weapons testing. Many times after operations ceased, sites were abandoned with little or no thought as to what was left behind. Because costs to transport wastes and debris from remote Alaskan sites are considerable, entire facilities were commonly left intact or minimally cleaned. At some sites, hazardous materials were spilled with little or no subsequent cleanup. On many refuges in Alaska (and at other locations throughout Alaska), abandoned 55 gallon drums dot the landscape. These abandoned drums rust through with time, releasing their contents (if any) to the surrounding environment.

Figure 1. The 16 National Wildlife Refuges in Alaska.



Graphics by USFWS.